REMARKS

Reconsideration of this application is requested. Claims 13-33 are pending in the application subsequent to entry of this amendment.

The claims have been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention and to address the issues raised on page 2 of the Official Action concerning claim definiteness as well as proper statutory subject matter mentioned by the examiner with regard to original claim 11.

The subject matter of claim 3 has been incorporated into claim 1 and now appears as new claim 13. The "if necessary" portion of original claim 1 has been made the subject of dependent claim 14. Previous claim 3 has been revised to include a statement of the pore size which is based on the description of the invention found at page 5, lines 13-16, and now appears as new claim 17. Previous claims 2 and 4 have been revised and now appear as new claims 15 and 18.

Previous claim 5 has been separated into a series of three claims, now 19-21, directed to various aspects of original claim 5 including the "suitable" possibilities. Similar adjustments have been made to previous claim 6 which is replaced by new claims 22-24. Claim 7 has been revised and now appears as new claim 25. Original claim 8 has been split into three separate claims, new claims 26-28, as has original claim 9, which is now claims 29-31. Product-by-process claim 10 (now new claim 32) been adjusted for consistency with the previous claims while original claim 11 has been rewritten (new claim 34) as a method of providing nutrition consistent with U.S. practice. It is submitted that these new claims are compliant with 35 U.S.C. § 112, second paragraph, and properly define the invention. No new matter has been introduced. Favorable consideration of these claims is requested.

The first two lines of page 3 of the Official Action question the terminology "substantially bovine insulin-free" as used in original claims 10 and 12. The expression "substantially bovine insulin-free" is explained in the specification (*see e.g.*, page 7, lines 15 to 22) namely, that the bovine insulin content of the whey is decreased in the

treatment according to the invention from 21 to 3 ng/g protein, and according to Examples 1 to 6, up to 86% of the bovine insulin was removed in the treatment. However, the product still contained a very small amount of bovine insulin. Applicants are of the view that it is technically not possible to get a product that is totally free of bovine insulin. Therefore, the product is aptly and clearly defined as "substantially bovine insulin free."

Claims 1 to 10 and 12 are rejected under 35 U.S.C. § 102(a) as being anticipated by Vaarala et al (WO 98/48640). It should be noted that the priority application for WO 98/48640 is Finnish patent application 971872, filed on April 30, 1997, and Finnish patent application 978172 is cited and discussed in the specification of the subject application on page 2, lines 28 to 32. Four of the present inventors are identified as applicants on the cited PCT application and thus are well qualified to comment on this citation.

Vaarala et al teach a multi-step process for removing bovine insulin from a protein material originating from cow's milk. This multi-step process is set forth in claim 2, and in one embodiment the steps are (a) resin treatment with a strong cation exchange resin, (b) concentrating by ultrafiltration and dia-filtration, (c) hydrolysis and ultrafiltration, and (d) hydrophobic chromatographic treatment. In the embodiment of claim 9 the chromatographic treatment is preferably effected with a hydrophobic adsorption resin.

The examiner will note that the resin used in Example 1 of WO 98/48640 is Amberlite C-20, which is a strong cation exchange resin (*see* page 8, line 35 in WO 98/48640), *i.e.*, the resin used in above-mentioned step (a). Above-mentioned steps (c) and (d) are set forth in Examples 5 and 6 on page 10, where the resin is Amberlite XAD-16, *i.e.*, hydrophobic adsorption resin (*see* page 7, line 30).

The method of the present invention using only resin, *i.e.*, a certain macroporous adsorption resin, is much more practical than the above-mentioned multi-step process of Vaarala using two different resins, *i.e.*, a strong cation exchange resin in step (a) and a hydrophobic adsorption resin in step (d).

In addition, in WO 98/48640 there is no suggestion to use macroporous adsorption resins for removing bovine insulin from a liquid fat-free proteinous material originating from cow's milk in the same way as in the present invention.

For the above reasons, it is respectfully submitted that the claims of this application are in proper formal order and define subject matter that is both novel and inventive over the disclosure of the cited document. Reconsideration and favorable action are solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____ 2/9/05
Arthur R. Crawford
Reg. No. 25,327

ARC:lsp
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100